

EPA orders oil companies to monitor public water supply and private wells in Poplar, Montana

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Drinking water currently safe for consumption; order requires contingency plan for treatment or alternate supply

(Denver, Colorado – December 16, 2010) In response to recent detections of low levels of oil production-related contaminants in the public water supply that serves the city of Poplar, Montana, and the Fort Peck Indian Reservation, the U.S. Environmental Protection Agency (EPA) today issued an order to Murphy Exploration & Production Co. (Murphy), Pioneer Natural Resources USA, Inc. (Pioneer), and Samson Hydrocarbons Co. (Samson).

EPA's order, issued under the Safe Drinking Water Act, requires the companies to monitor Poplar's water supply wells as well as the private wells of residents in the potentially affected area, upon resident request. The order also requires the companies to provide additional water treatment and/or alternate supplies if EPA determines the groundwater in municipal wells is becoming a public health risk. EPA's action ensures a continued safe supply of drinking water to the residents of Poplar, Montana and the Fort Peck Reservation.

Murphy, Pioneer and Samson are, directly or through corporate acquisition, historic oil producers in the East Poplar oil field. The oil field has several known contaminated groundwater plumes caused by past production practices.

"This order is necessary to ensure that more than 3,000 people who rely on the Poplar public water system have safe drinking water, now and in the future," said Jim Martin, EPA's regional administrator in Denver. "While treated water from the city's system is currently safe to drink, we expect the quality of the groundwater used by the system's wells to degrade over time. As companies responsible for historic production in the area, EPA is requiring Murphy, Pioneer and Samson to increase monitoring and prepare a contingency plan to provide an alternate water source."

Specifically, EPA's order requires the companies to provide funds to support:

- monthly sample collection and analysis from Poplar's municipal water supply wells to monitor for any public health risk,
- sampling and analysis at private wells located between the known locations of contaminant plumes and the city's public water wells, as requested by the owners,
- a study of area groundwater contamination and an assessment of cleanup options, and
- a contingency to provide a safe and reliable drinking water supply if the current water source is determined to present a public health risk.

The primary source of groundwater contamination in the East Poplar oil field is produced brine, highly saline wastewater extracted during oil production. Undiluted, produced brine can be significantly more saline than seawater, rendering water untreatable and undrinkable. This brine also contains elevated levels of metals, such as manganese, and organic compounds associated with oil production, including benzene and toluene. The edges of these plumes generally have lower concentrations of contaminants than in their centers.

The contaminated plumes have been moving in the local aquifer toward the city of Poplar. This aquifer is the only currently available source of drinking water for three public water supply wells that serve the surrounding area. While the most recent sample results analyzed by EPA indicate that produced brine has reached these wells, concentrations of contaminants in treated drinking

water are at low levels and do not pose a risk to human health. EPA's order seeks to ensure that residents will be protected if the brine concentration in the water supply increases over time as the plume moves toward the city's wells.

EPA, the State of Montana, the Fort Peck Tribes, the U.S. Geological Survey and other agencies have been aware of groundwater contamination in the East Poplar oil field for several decades. Various studies have been done in the area, and the nature, extent and movement of the plumes are relatively well known. EPA has addressed past contamination through four Safe Drinking Water Act orders issued to production companies between 1999 and 2004.

Poplar is the seat of the Fort Peck Assiniboine and Sioux Tribes. The Poplar-area public water system, the Fort Peck Tribe Water Resource, serves approximately 3,000 people, including tribal and non-tribal households.

EPA has made securing compliance with environmental laws in the energy extraction sector one of the agency's National Enforcement Initiatives for 2011 to 2013. The initiative focuses on areas of the country where extraction activities are concentrated. Enforcement activities will vary with the type of activity and pollution problem presented.

To learn more about EPA's National Enforcement Initiatives, visit:

<http://epa.gov/compliance/data/planning/initiatives/initiatives.html>

To access EPA's Safe Drinking Water order and additional information visit:

<http://www.epa.gov/region8/compliance/index.html>